

Draft

Digital Printing Working Group Integrated Digital Printing ICS

Date: 12 March 2004

Version **V0.26**

File: **DP-ICS-and-AppNote-v26-09-Mar-2004.doc, .pdf**

ICSVersion: **DP_L1-1.0**

Revisions are in **red** with change bars in the right margin.
The open ISSUES are **highlighted in green**.

Abstract

This CIP4 JDF Interoperability Conformance Specification (ICS) defines the interoperability requirements for a subset of JDF defined as Level 1 Integrated Digital Printing. Level 1 is useful for color and black and white integrated digital printing systems with in-line finishing capabilities. It encompasses production printing IPP semantics.



Copyright Notice

Copyright © 2000-2004, International Cooperation for Integration of Processes in Prepress, Press and Postpress, hereinafter referred to as CIP4. All Rights Reserved

Permission is hereby granted, free of charge, to any person obtaining a copy of the Specification and associated documentation files (the “Specification”) to deal in the Specification, including without limitation the rights to use, copy, publish, distribute, and/or sublicense copies of the Specification, and to permit persons to whom the Specification is furnished to do so, subject to the following conditions. The above copyright notice and this permission notice must be included in all copies or substantial portions of the Specification.

THE SPECIFICATION IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT WILL CIP4 BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF, OR IN CONNECTION WITH THE SPECIFICATION OR THE USE OR OTHER DEALINGS IN THE SPECIFICATION.

Except as contained in this notice or as allowed by membership in CIP4, the name of CIP4 must not be used in advertising or otherwise to promote the use or other dealings in this Specification without prior written authorization from CIP4.

Licenses and Trademarks

International Cooperation for Integration of Processes in Prepress, Press and Postpress, CIP4, Job Description Format, JDF and the CIP4 logo are trademarks of CIP4.

Rather than put a trademark symbol in every occurrence of other trademarked names, we state that we are using the names only in an editorial fashion, and to the benefit of the trademark owner, with no intention of infringement of the trademark.

Table of Contents

Copyright Notice	2
Licenses and Trademarks	2
1 Introduction	5
1.1 Scope.....	5
2 Terminology	5
2.1 Conformance Terminology.....	5
2.2 Other Terminology	5
3 JDF Supported by Integrated Digital Printing ICS	6
3.1 Combined Digital Printing Node	6
3.1.1 <i>Settings Policy</i>	6
3.1.2 <i>Processes</i>	6
3.1.3 <i>JDF Conformance Tables for Integrated Digital Printing ICS</i>	8
4 Conformance Requirements for <fill in your ICS>	49
4.1 Conformance Requirements for Controller/Agents	49
4.2 Conformance Requirements for Devices	49
5 References	49
5.1 Normative References.....	49
5.2 Informative References	50

Table of Tables

Table 1 - Possible successor processes of each predecessor process.....	7
Table 2 JDF (Combined Digital Printing Node).....	8
Table 3 All Elements (except Combined Digital Printing Node)	10
Table 4 All Resources.....	11
Table 5 All ResourceLink elements.....	11
Table 6 All ResourceRef elements	11
Table 7 ApprovalParams	12
Table 8 ApprovalPerson	12
Table 9 ApprovalSuccess.....	13
Table 10 AuditPool.....	13
Table 11 ColorantControl	13
Table 12 ColorantParams.....	14
Table 13 Comment	14
Table 14 Component.....	15
Table 15 ComponentLink	16
Table 16 CoverApplicationParams	17
Table 17 CustomerInfo	17
Table 18 CustomerMessage.....	18
Table 19 Device.....	18
Table 20 DigitalPrintingParams.....	18
Table 21 Disjointing	20
Table 22 FileSpec	20
Table 23 FitPolicy.....	22
Table 24 FoldingParams	23
Table 25 HoleMakingParams	23
Table 26 ImageShift	23

Table 27 InsertSheet	24
Table 28 InterpretingParams	26
Table 29 LayoutElement	26
Table 30 LayoutPreparationParams	27
Table 31 Location	28
Table 32 Media	29
Table 33 MediaRef	31
Table 34 NodeInfo	32
Table 35 Part	32
Table 36 PageCell	33
Table 37 RenderingParams	33
Table 38 ResourceLinkPool	33
Table 39 ResourcePool	35
Table 40 RunList	37
Table 41 RunListLink	39
Table 42 ScreeningParams	39
Table 43 ScreenSelector	39
Table 44 SeparationSpec	40
Table 45 Sheet	40
Table 46 SpineTapingParams	40
Table 47 StitchingParams	41
Table 48 TrappingDetails	41
Table 49 TrimmingParams	42

1 Introduction

JDF is a very comprehensive job ticket format that allows for many different ways to specify a digital print job. To minimize complexity and to better guarantee interoperability between JDF producers and consumers, this ICS identifies a relatively small subset of JDF for Digital Printing.

This ICS defines a subset of JDF referred to as Level 1. Level 1 is useful for color and black and white integrated digital printing systems with in-line finishing capabilities. It encompasses production printing IPP semantics.

A companion Integrated Digital Printing Application Note [DP-AppNote] explains this ICS in more detail, but does not contain any normative material, i.e., does not contain any material that defines conformance to this ICS.

1.1 Scope

This ICS defines a subset of JDF referred to as Level 1. Level 1 is useful for color and black and white integrated digital printing systems with in-line finishing capabilities. It encompasses production printing IPP semantics.

2 Terminology

2.1 Conformance Terminology

See [BASE-ICS].

2.2 Other Terminology

This Conformance Specifications defines the following additional terminology:

Combined Digital Printing Node - A JDF *Combined* node (value of the Types attribute is "Combined") that contains a DigitalPrinting process and that conforms to the requirements of this ICS.

Conformance Level (**Level** for short) - a set of **REQUIRED** and **OPTIONAL Features** of an **Interface** for a **Device** to support that provide a certain level of service. If an **Interface** has multiple **Conformance Levels**, each higher **Conformance Level** is a superset of all the lower levels.

Controller/Agent as defined by the JDF Specification [JDF] is a JDF Controller/Agent that writes and routes JDF, representing a job, to a **Device**.

Device as defined in the JDF Specification [JDF] interprets JDF and executes instructions representing a job.

Level 1 Combined Digital Printing Node conforms to the requirements of the ICS for Digital Printing for Conformance Level 1.

Level 1 Controller/Agent conforms to the requirements of the ICS for Digital Printing for Conformance Level 1.

Level 1 Device conforms to the requirements of the ICS for Digital Printing for Conformance Level 1.

3 JDF Supported by Integrated Digital Printing ICS

In defining conformance for Digital Printing Devices, this ICS defines the JDF that the Integrated Digital Printing Device must support. This JDF includes all of the JDF that must be contained in a Combined Digital Printing Node, and also includes additional JDF that may optionally be contained in a Combined Digital Printing Node.

3.1 Combined Digital Printing Node

A conforming Device **MUST** execute a Combined Digital Printing Node.

3.1.1 Settings Policy

A conforming Device **MUST** support the SettingsPolicy attribute (and the BestEffortExceptions, MustHonorExceptions, and OperatorInterventionExceptions attributes) as supplied for that node or inherited from any parent node. However, such support is only **REQUIRED** for processes, elements, attributes, and attribute values included in this ICS.

3.1.2 Processes

A Combined Digital Printing Node **MUST** be a JDF *Combined* node as specified in [JDF].

3.1.2.1 Required Processes

A Combined Digital Printing Node **MUST** contain one and only one of each of the following processes:

1. LayoutPreparation
2. Imposition
3. Interpreting
4. Rendering
5. DigitalPrinting

3.1.2.2 Optional Finishing Processes

A Combined Digital Printing Node **MAY** contain 0 or more occurrences of each of the following processes:

1. Stitching
2. Folding
3. Trimming
4. HoleMaking
5. CoverApplication
6. SpineTaping

3.1.2.3 Other Optional Processes

A Combined Digital Printing Node **MUST** contain the indicated number of occurrences of each of the following processes:

1. Trapping - 0 or 1
2. Screening - 0 or 1
3. Approval - 0 or 1

3.1.2.4 Sequence of Processes

The following table shows the processes that are possible successors of other processes. The processes listed across the top of the table are the processes that are immediate predecessors of the processes listed along the left side. An X indicates that it is valid for the Successor process to follow the Predecessor process. The required processes are bold typeface.

Table 1 - Possible successor processes of each predecessor process

		Immediate Predecessor Process														
		LayoutPreparation	Imposition	Trapping (vector)	Interpreting	Rendering	Trapping (raster)	Screening	DigitalPrinting	Stitching	Folding	Trimming	HoleMaking	CoverApplication	SpineTaping	Approval
Successor Process	LayoutPreparation															
	Imposition	X		X												
	Trapping (vector)		X		X											
	Interpreting		X	X												
	Rendering			X	X											
	Trapping (raster)					X										
	Screening					X	X									
	DigitalPrinting					X	X	X								
	Stitching								X	X	X	X	X	X	X	X
	Folding								X	X	X	X	X	X	X	X
	Trimming								X	X	X	X	X	X	X	X
	HoleMaking								X	X	X	X	X	X	X	X
	CoverApplication								X	X	X	X	X	X	X	X
	SpineTaping								X	X	X	X	X	X	X	X
Approval								X	X	X	X	X	X	X	X	

3.1.3 JDF Conformance Tables for Integrated Digital Printing ICS

The following tables summarize the JDF resources and elements that are supported by the Integrated Digital Printing ICS. The tables follow the format as defined in the [BASE-ICS] for JDF Conformance Tables, except in the following cases:

1. Another column has been added that identifies the Feature(s) that are defined in the [DP-AppNote] that use the resource or element. This information is informative.
2. In the [BASE-ICS] column 5 is titled "Controller". In the Integrated Digital Printing ICS the corresponding column is "Controller/Agent".

Table 2 JDF (Combined Digital Printing Node)

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Controller/Agent	Device	Features where used
				Level 1	Level 1	
1	JDF/		element	W	R	All
2	@Activation ?		enumeration	W	R	
3			Active	W	R	same as above
4			Held	W	R	same as above
5	@Category ?		NMTOKEN	W	R	All
6		Must be present.	DigitalPrinting	W	R	All
7	@DescriptiveName		string	W*	R	Error! Reference source not found.
8	@ICSVersions ?		NMTOKENS	W	R	Error! Reference source not found.
9		One or more MUST be present	DP_L1-1.0	W	R	Error! Reference source not found.
10	@ID		ID	W	R	All
11	@JobID ?	If not present in the Combined Digital Printing Node, is inherited from an ancestor node.	ID	W*	R	Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
18	@TemplateID ?		string	W*	R?	Error! Reference source not found.
19	@TemplateVersion ?		string	W*	R?	Error! Reference source not found.
20	@Type		NMTOKEN	W	R	All
21			Combined	W	R	All
22	@Types?	See Table 1 - Possible successor processes of each predecessor process for the order of the values.	NMTOKENS	W	R	All
23			LayoutPreparation	W	R	Many
24			Imposition	W	R	All
25			Interpreting	W	R	Error! Reference source not found.
26			Rendering	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
27			DigitalPrinting	W	R	Many
28			CoverApplication	W*	R?	Error! Reference source not found.
29			Folding	W*	R?	Error! Reference source not found.
30			HoleMaking	W*	R?	Error! Reference source not found.
31			Stitching	W*	R?	Error! Reference source not found.
32			SpineTaping	W*	R?	Error! Reference source not found.
33			Trimming	W*	R?	Error! Reference source not found.
34			Approval	W*	R?	Error! Reference source not found.
35			Screening	W*	R?	Error! Reference source not found.
36			Trapping	W*	R?	Error! Reference source not found.
37	@SettingsPolicy ?		enumeration	W*	R?	Error! Reference source not found.
38		This is the Default, but its NOT a Schema default.	BestEffort	W*	R	Error! Reference source not found.
39			MustHonor	W*	R	Error! Reference source not found.
40			OperatorIntervention	W*	R	Error! Reference source not found.
41	@Status		enumeration	W	R	All
42			Ready	W	R	All
43	@Version ?	MUST be present in both JDF root node. and Combined Digital Printing Node.	string	W	R	All

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
44			1.2	W	R	All
45	@xmlns ?	MUST be present in JDF root node.	URI	W	R	All
46			http://www.cip4.org/JDFSchema_1_1	W	R	All
47	AuditPool ?	MUST be present and local, is not inherited from an ancestor node.	element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
48	Comment *		element	W*	R	Error! Reference source not found.
49	CustomerInfo?	If not present in the Combined Digital Printing Node, is inherited from an ancestor node.	element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
50	NodeInfo ?	If present, MUST be local. Is not inherited from an ancestor node.	element	W*	R	Error! Reference source not found. Error! Reference source not found.
51	ResourcePool	MUST be present in Combined Digital Printing Node and/or an ancestors' node.	element	W	R	All
52	ResourceLinkPool	MUST be present and local, is not inherited from an ancestor node.	element	W	R	All

Table 3 All Elements (except Combined Digital Printing Node)

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
1	JDF/ <i>Element name/</i>		element	W	R	All
2	@BestEffortExceptions ?		NMTOKEN <i>where values are attribute names</i>	W*	R?	Error! Reference source not found.
3	@ID		ID	W	R	All
4	@MustHonorExceptions ?		NMTOKEN <i>where values are attribute names</i>	W*	R?	same as above
5	@OperatorInterventionExceptions ?		NMTOKEN <i>where values are attribute names</i>	W*	R?	same as above
6	@SettingsPolicy ?		enumeration	W*	R?	same as above
7		This is the Default, but its NOT a Schema default	BestEffort	W*	R	same as above
8			MustHonor	W*	R	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
9			OperatorIntervention	W*	R	same as above

Table 4 All Resources

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	//JDF/ ResourcePool/ Resource name/		element	W	R	All
2	@Class		enumeration	W	R	All
3			Consumable	W	R	All
4			Implementation	W	R	All
5			Parameter	W	R	All
6			Quantity	W	R	All
7	@Status		enumeration	W	R	All
8		Valid value for input and output resources other than Physical Resources	Complete	W	R	All
9		Valid value for input Resources	Available	W	R	All
10		Valid value for output Resources	Unavailable	W	R	All

Table 5 All ResourceLink elements

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourceLinkPool/ ResourceLink name/		element	W	R	All
2	@CombinedProcessIndex ?	See Application Note Error! Reference source not found. on page Error! Bookmark not defined. for a description of when to specify CombinedProcessIndex.	IntegerList	W*	R	All
3	@rRef		IDREF	W	R	All
4	@Usage		enumeration	W	R	All
5			Input	W	R	All
6			Output	W	R	All

Table 6 All ResourceRef elements

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/		element	W	R	All

Table 9 ApprovalSuccess

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/ApprovalSuccess/	No attributes are supported	element	W*	R	Error! Reference source not found.

Table 10 AuditPool

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/AuditPool/		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	Created *		element	W	R	Error! Reference source not found. Error! Reference source not found.
3	Modified *		element	W*	R	Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				Level 1	Level 1	

Table 11 ColorantControl

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/ColorantControl/		element	W*	R	Error! Reference source not found. Error! Reference source not found.
2	@PartIDKeys ?		enumerations	W*	R	same as above
3			DocIndex	W*	R	same as above
4			RunIndex	W*	R	same as above
5			DocIndex RunIndex	X	X	same as above
7	@ProcessColorModel ?		NMTOKEN	W*	R	Error! Reference source not

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
	Comment/					
2	JDF/ Comment/		element	W?	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
3	@Language ?		language	W?	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
4	@Name ?		NMTOKEN	W?	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
5			Description (D)	W?	R	Error! Reference source not found.
6		If present, MUST appear in the root JDF Node.	JobDescription	W?	R	Error! Reference source not found.
7			Instruction	W?	R	Error! Reference source not found.
8			TemplateDescription	W*	R?	Error! Reference source not found.
9	text		text	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 14 Component

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
1	JDF/ ResourcePool/ Component/		refelement	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr oller/ Agent	Devic e	Features where used
				Level 1	Level 1	
						found.
2	@ComponentType		enumeration	W	R	All
3			FinalProduct	W	R	All
4			PartialProduct	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
5	@ProductID ?		string	W*	R?	Error! Reference source not found.
6	@Status		enumeration	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
		Needed only when changing Orientation on an exchange resource.	Complete	W	R	same as above

Table 15 ComponentLink

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr oller/ Agent	Devic e	Features where used
				Level 1	Level 1	
1	JDF/ ResourceLinkPool/ ComponentLink/		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	@Amount ?		integer	W	R	Error! Reference source not found.
3	@Orientation ?	Orientation is only valid when PipeProtocol="Internal"	enumeration	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
4			Rotate0	W*	R	same as above
5			Rotate90	W*	R	same as above
6			Rotate180	W*	R	same as above
7			Rotate270	W*	R	same as above
8			Flip0	W?	R?	same as above
9			Flip90	W?	R?	same as above
10			Flip180	W?	R?	same as above
11			Flip270	W?	R?	same as above
12	@PipeID		ID	W	R	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	

Table 18 CustomerMessage

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ CustomerInfo/ CustomerMessage		element	W?	R	Error! Reference source not found.
3	@MessageEvents		NMTOKENS	W	R	same as above
5			JobCompletedSuccessfully	W*	R	same as above
6			JobCompletedWithErrors	W*	R	same as above
7			JobCompletedWithWarning	W*	R	same as above

Table 19 Device

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ Device/		element	W*	R	Error! Reference source not found.
2	@DeviceID		string	W	R	same as above

Table 20 DigitalPrintingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ DigitalPrintingParams/		element	W	R	Error! Reference source not found. Error! Reference source not

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
57	@URL ?		URL	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
58		Required for MIME multipart/related.	cid:	W*	R	same as above
59			file:	W*	R	same as above
60			http:	W*	R	same as above

Table 23 FitPolicy

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/LayoutPreparationParams/FitPolicy/		refelement	W*	R	Error! Reference source not found.
2	JDF/ResourcePool/LayoutPreparationParams/PageCell/FitPolicy/		element	W*	R	Error! Reference source not found.
8	@SizePolicy ?		enumeration	W*	R	Error! Reference source not found. Error! Reference source not found.
10			ClipToMaxPage	W*	R	same as above
12			ReduceToFit	W*	R	same as above

Table 24 FoldingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/FoldingParams/		element	W*	R?	Error! Reference source not found.
2	@FoldCatalog ?		string	W*	R?	same as above
3		booklets	F4-1	W*	R?	same as above
4		brochures	F6-2	W*	R?	same as above
5		c-fold	F6-4	W*	R?	same as above
6		z-fold	F6-6	W*	R?	same as above
7	@NoOp ?		boolean	W*	R	same as above
8			false (D)	W*	R	same as above
9			true	W*	R	same as above
10	@PartIDKeys ?		enumerations	W*	R	same as above
11			DocIndex	W*	R	same as above
12			RunIndex	W*	R	same as above
13			DocIndex RunIndex	X	X	same as above

Table 25 HoleMakingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/HoleMakingParams/		element	W*	R?	Error! Reference source not found.
2	@HoleType ?		enumeration	W*	R?	same as above
3			S-generic	W*	R?	same as above
4			S1-generic	W*	R?	same as above
5			R2-generic	W*	R?	same as above
6			R3-generic	W*	R?	same as above
7			R4-generic	W*	R?	same as above
8			R5-generic	W*	R?	same as above
9	@NoOp ?		boolean	W*	R	same as above
10			false (D)	W*	R	same as above
11			true	W*	R	same as above
12	@PartIDKeys ?		enumerations	W*	R	same as above
13			DocIndex	W*	R	same as above
14			RunIndex	W*	R	same as above
15			DocIndex RunIndex	X	X	same as above

Table 26 ImageShift

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/LayoutPreparationParams/		element	W*	R	Error! Reference source not found. Error! Reference source not

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
	ImageShift/					found. Error! Reference source not found.
12	@ShiftBack ?		XYPair (doubles)	W*	R	Error! Reference source not found.
13	@ShiftFront ?		XYPair (doubles)	W*	R	Error! Reference source not found.

Table 27 InsertSheet

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
1	JDF/ ResourcePool/ RunList/ InsertSheet/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	JDF/ ResourcePool/ LayoutPreparationParams/ InsertSheet/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.
11	@SheetFormat ?		NMTOKEN	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
12			Blank	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
						Error! Reference source not found.
16			Standard	W*	R	Error! Reference source not found.
17	@SheetType		enumeration	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
18			FillSheet	W*	R	Error! Reference source not found. Error! Reference source not found.
19			InsertSheet	W*	R	Error! Reference source not found.
20			JobSheet	W*	R	Error! Reference source not found.
21			SeparatorSheet	W*	R	Error! Reference source not found. Error! Reference source not found.
22	@SheetUsage		enumeration	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
23			FillForceBack	W	R	Error! Reference source not found. Error! Reference source not found.
24			FillForceFront	W	R	Error! Reference source not found. Error! Reference source not found.
27			Header	W	R	Error! Reference source not found. Error! Reference source not found.
28			Trailer	W	R	Error! Reference source not found. Error! Reference source not found.
29			Slip	W	R	Error! Reference source not found.
30			SlipCopy	W	R	Error! Reference source not found.
32	Sheet ?		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						Error! Reference source not found.

Table 28 InterpretingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/InterpretingParams/		element	W	R	Error! Reference source not found.
2	@PrintQuality ?		enumeration	W*	R	same as above
3			Draft	W*	R?	same as above
4			High	W*	R?	same as above
5			Normal	W*	R	same as above
6	@PartIDKeys ?		enumerations	W*	R	same as above
7			DocIndex	W*	R	same as above
8			RunIndex	W*	R	same as above
9			DocIndex RunIndex	X	X	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				Level 1	Level 1	

Table 29 LayoutElement

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/LayoutElement/		element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	FileSpec ?		relement	W*	R	Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 30 LayoutPreparationParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ LayoutPreparationParams/		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	@NumberUp ?		2 integers	W*	R	Error! Reference source not found.
3	@PageDistributionScheme ?		enumeration	W*	R	Error! Reference source not found.
4			Perfect	W*	R	same as above
5			Saddle	W*	R	same as above
6			Sequential (D)	W*	R	same as above
7	@PageOrder		enumeration	W*	R	Error! Reference source not found.
8			Booklet	W*	R	same as above
9			Reader (D)	W*	R	same as above
10	@PresentationDirection ?		enumeration	W*	R	Error! Reference source not found. Error! Reference source not found.
11			FoldCatalog	W*	R	same as above
12			Yxz	W*	R	same as above
13	@Rotate ?		enumeration	W*	R	Error! Reference source not found.
14			Rotate0 (D)	W*	R	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Contr	Features where used
				oller/ Agent Level 1	oller/ Agent Level 1	
17		Same as Main	LargeCapacity	W*	R	same as above
26		Same as Upper	Top	W*	R	same as above

Table 32 Media

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
1	JDF/ ResourcePool/ Media/		element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	JDF/ ResourcePool/ RunList/ InsertSheet/ Sheet/ Media/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.
3	JDF/ ResourcePool/ LayoutPreparationParams/ InsertSheet/ Sheet/ Media/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.
4	JDF/ ResourcePool/ DigitalPrintingParams/ Media/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.
5	@Amount		double	W?	R?	same as above
6	@BackCoatings ?		enumeration	W*	R?	same as above
7			Coated	W*	R?	same as above
8			Glossy	W*	R?	same as above
9			HighGloss	W*	R?	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
10			InkJet	W*	R?	same as above
11			Matte	W*	R?	same as above
12			Satin	W*	R?	same as above
13			Semigloss	W*	R?	same as above
14			None	W*	R?	same as above
15	@Brand ?		string	W*	R?	same as above
16	@DescriptiveName ?		string	W*	R	same as above
17	@Dimension ?		XYPair (doubles)	W*	R?	same as above
18	@FrontCoatings ?	See @BackCoatings for valid values	enumeration	W*	R?	same as above
19	@HoleType ?		enumeration	W*	R?	same as above
20			None (D)	W*	R?	same as above
21			S-generic	W*	R?	same as above
22			S1-generic	W*	R?	same as above
23			R2-generic	W*	R?	same as above
24			R3-generic	W*	R?	same as above
25			R4-generic	W*	R?	same as above
26			R5-generic	W*	R?	same as above
27	@ImageableSide ?		enumeration	W*	R?	same as above
28			Back	W*	R?	same as above
29			Both	W*	R?	same as above
30			Front	W*	R?	same as above
31			Neither	W*	R?	same as above
33	@MediaColorName ?		NamedColor	W*	R?	same as above
35	@MediaColorNameDetails ?		string	W*	R?	same as above
36	@MediaSetCount ?		integer	W*	R?	same as above
37	@MediaType ?		enumeration	W*	R?	same as above
40			Paper	W*	R?	same as above
41			Transparency	W*	R?	same as above
42	@MediaTypeDetails ?		NMOKEN	W*	R?	same as above
43			CardBoard	W*	R?	same as above
44			ContinuousLong	W*	R?	same as above
45			ContinuousShort	W*	R?	same as above
46			Envelope	W*	R?	same as above
47			EnvelopePlain	W*	R?	same as above
48			EnvelopeWindow	W*	R?	same as above
49			FullCutTabs	W*	R?	same as above
50			Labels	W*	R?	same as above
51			Letterhead	W*	R?	same as above
52			MultiLayer	W*	R?	same as above
53			MultiPartForm	W*	R?	same as above
54			Photographic	W*	R?	same as above
55			PreCutTabs	W*	R?	same as above
56		Same as Paper	Stationery	W*	R?	same as above
57			TabStock	W*	R?	same as above
58			Tractor	W*	R?	same as above
59	@MediaUnit ?		enumeration	W*	R?	same as above
60			Continuous	W*	R?	same as above
61			Roll	W*	R?	same as above
62			Sheet (D)	W*	R?	same as above
63	@Opacity ?		enumeration	W*	R?	same as above
64			Opaque	W*	R?	same as above
65			Transparent	W*	R?	same as above
66			Translucent	W*	R?	same as above
67	@PartIDKeys ?		enumeration	W*	R	same as above
68			Location	W*	R	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 34 NodeInfo

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ NodeInfo/		element	W*	R	Error! Reference source not found.
2	@JobPriority ?		integer	W*	R	Error! Reference source not found.
3	@Route ?		URL	W*	R	Error! Reference source not found.

Table 35 Part

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourceLinkPool/ RunListLink/ Part/		element	W*	R	Error! Reference source not found.
2	JDF/ ResourcePool/ MediaRef/ Part/		element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
3	@DocIndex		IntegerList	W*	R	Error! Reference source not found.
4	@RunIndex		IntegerList	W*	R	Error! Reference source not found.
5	@Location		string	W*	R	Error! Reference source not found. Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 36 PageCell

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ LayoutPreparationParams PageCell/		refelement	W*	R	Error! Reference source not found.
2	@Rotate ?		string	W*	R	same as above
3			Rotate0 (D)	W*	R	same as above
4			Rotate90	W*	R	same as above
5			Rotate180	W*	R	same as above
6			Rotate270	W*	R	same as above
7	FitPolicy ?		refelement	W*	R	same as above

Table 37 RenderingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ RenderingParams/		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
4	@PartIDKeys ?		enumerations	W*	R	same as above
5			DocIndex	W*	R	same as above
6			RunIndex	W*	R	same as above
7			DocIndex RunIndex	X	X	same as above

Table 38 ResourceLinkPool

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						found. Error! Reference source not found.
12	Error! Reference source not found. ?	Also see Table 5 All ResourceLink elements for additional attributes	element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
13	RenderingParamsLink	See Table 5 All ResourceLink elements for attributes	element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
14	RunListLink	Also see Table 5 All ResourceLink elements for additional attributes	element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
15	ScreeningParamsLink ?	See Table 5 All ResourceLink elements for attributes	element	W*	R	Error! Reference source not found.
16	SpineTapingParamsLink ?	See Table 5 All ResourceLink elements for attributes	element	W*	R?	Error! Reference source not found.
17	StitchingParamsLink ?	See Table 5 All ResourceLink elements for attributes	element	W*	R?	Error! Reference source not found.
18	TrappingDetailsLink ?	See Table 5 All ResourceLink elements for attributes	element	W*	R	Error! Reference source not found.
19	TrimmingParamsLink ?	See Table 5 All ResourceLink elements for attributes	element	W*	R?	Error! Reference source not found.

Table 39 ResourcePool

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
1	JDF/ ResourcePool/		element	W	R	All
2	ApprovalParams?		element	W*	R	Error! Reference source not found.
3	ColorantControl?		element	W*	R	Error! Reference source not found.
4	Component		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
5	CoverApplicationParams ?		element	W*	R?	Error! Reference source not found.
6	Device?		element	W*	R	Error! Reference source not found.
7	DigitalPrintingParams		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
8	FoldingParams?		element	W*	R?	Error! Reference source not found.
9	HoleMakingParams?		element	W*	R?	Error! Reference source not found.
10	InterpretingParams		element	W	R	Error! Reference source not found.
11	LayoutElement ?		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
12	LayoutPreparationParams		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent Level 1	e Level 1	
						Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
13	Media?		element	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
14	RenderingParams		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
15	RunList		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
16	ScreeningParams?		element	W*	R	Error! Reference source not found.
17	SpineTapingParams ?		element	W*	R?	Error! Reference source not found.
18	StitchingParams?		element	W*	R?	Error! Reference source not found.
19	TrappingDetails?		element	W*	R	Error! Reference source not found.
20	TrimmingParams?		element	W*	R?	Error! Reference source not found.

Table 40 RunList

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	

				Level 1	Level 1	
1	JDF/ ResourcePool/ RunList/		element	W	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
2	@ComponentGranularity ?		enumeration	W*	R	same as above
3			All	W*	R	same as above
4			Document (D)	W*	R	same as above
8	@Directory ?		URL	W?	R	same as above
12	@EndOfDocument ?		boolean	W*	R	same as above
13			false	W*	R	same as above
14			true	W*	R	same as above
19	@Pages ?		IntegerRangeList	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
21	@PartIDKeys ?		enumerations	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
22			Run	W*	R	same as above
23	InsertSheet ?		refelement	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
34	LayoutElement ?		refelement	W*	R	Error! Reference source not

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
						found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 41 RunListLink

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourceLinkPool/ RunListLink/		element	W	R	Error! Reference source not found.
2	Part *		element	W*	R	Error! Reference source not found.

Table 42 ScreeningParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ ScreeningParams/		element	W*	R	Error! Reference source not found.
2	@PartIDKeys ?		enumerations	W*	R	same as above
3			DocIndex	W*	R	same as above
4			RunIndex	W*	R	same as above
5			DocIndex RunIndex	X	X	same as above
7	ScreenSelector *		element	W*	R	same as above

Table 43 ScreenSelector

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/		element	W*	R	Error! Reference source not found.

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
	ScreeningParams/ ScreenSelector/					
2	@ScreeningFamily ?		string	W*	R?	same as above
3	@ScreeningType ?		enumeration	W*	R	same as above

Table 44 SeparationSpec

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ ColorantControl/ ColorantParams/ SeparationSpec/		refelement	W*	R	Error! Reference source not found.
2	@Name		string	W*	R	same as above

Table 45 Sheet

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ RunList/ InsertSheet/ Sheet/		refelement	W*	R	Error! Reference source not found.
2	JDF/ ResourcePool/ LayoutPreparationParams/ InsertSheet/ Sheet/		refelement	W*	R	Error! Reference source not found. Error! Reference source not found.
3	Media ?		refelement	W*	R	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.

Table 46 SpineTapingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	

				Level 1	Level 1	
1	JDF/ResourcePool/SpineTapingParams/		element	W*	R?	Error! Reference source not found.
2	@NoOp ?		boolean	W?	R	same as above
3			false (D)	W?	R	same as above
4			true	W?	R	same as above
5	@PartIDKeys ?		enumerations	W*	R	same as above
6			DocIndex	W*	R	same as above
7			RunIndex	W*	R	same as above
8			DocIndex RunIndex	X	X	same as above

Table 47 StitchingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/StitchingParams/		element	W*	R?	Error! Reference source not found.
3	@NoOp ?		boolean	W?	R	same as above
4			false (D)	W?	R	same as above
5			true	W?	R	same as above
7	@PartIDKeys ?		enumerations	W*	R	same as above
8			DocIndex	W*	R	same as above
9			RunIndex	W*	R	same as above
10			DocIndex RunIndex	X	X	same as above
12	@StitchType ?		enumeration	W*	R	same as above
13			Corner	W*	R	same as above
14			Saddle	W*	R?	same as above
15			Side	W*	R?	same as above

Table 48 TrappingDetails

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ResourcePool/TrappingDetails/		element	W*	R?	Error! Reference source not found.
2	@NoOp ?		boolean	W*	R	same as above
3			false (D)	W*	R	same as above

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
4			true	W*	R	same as above
5	@PartIDKeys ?		enumerations	W*	R	same as above
6			DocIndex	W*	R	same as above
7			RunIndex	W*	R	same as above
8			DocIndex RunIndex	X	X	same as above

Table 49 TrimmingParams

Item	Attribute (@) or Element	Notes	Data Type or Value (D=Default value)	Contr	Devic	Features where used
				oller/ Agent	e	
				Level 1	Level 1	
1	JDF/ ResourcePool/ TrimmingParams/		element	W*	R?	Error! Reference source not found.
2	@NoOp ?		boolean	W*	R	same as above
3			false (D)	W*	R	same as above
4			true	W*	R	same as above
5	@PartIDKeys ?		enumerations	W*	R	same as above
6			DocIndex	W*	R	same as above
7			RunIndex	W*	R	same as above
8			DocIndex RunIndex	X	X	same as above

6 -1 Last page range of the document



4 Conformance Requirements for <fill in your ICS>

See [JDF] section 1.4.2.4 Conformance Requirements for Support of Combined Processes. This section specifies the conformance requirements for Controller/Agents and Devices.

4.1 Conformance Requirements for Controller/Agents

[You MUST list the conformance requirements for the Producer of your Interface as one more Conformance Levels, Modules, and/or Profiles.]

A Controller/Agent conforming to this ICS:

1. MUST produce JDF instances that conform to [JDF].
2. MUST meet the conformance requirements for what a Controller produces and consumes according to section 3 of this ICS.
3. MAY produce and consume processes, elements, attributes, and attribute values *not* explicitly specified in section 3 of this ICS as long as the Controller/Agent has a mode of operation that the user can select or configure that always produces and consumes *only* the processes, elements, attributes, and attribute values *explicitly* specified in section 3.

4.2 Conformance Requirements for Devices

A Device conforming to this ICS:

1. MUST consume JDF instances according to [JDF].
2. MUST meet the conformance requirements for what a Device consumes and produces according to section 3 of this ICS.
3. MAY consume and produce processes, elements, attributes, and attribute values *not* explicitly specified in section 3 of this ICS as long as the Device has a mode of operation that the user can select or configure that always consumes and produces *only* the processes, elements, attributes, and attribute values *explicitly* specified in section 3.

5 References

CIP4 documents are available at <http://www.cip4.org>. RFCs are available at: <http://www.rfc-editor.org/rfcsearch.html>. Internet-Drafts are available at: <http://www.ietf.org/ID.html>. IEEE-ISTO PWG standards are located at: <http://www.pwg.org> or more specifically at: <http://www.pwg.org/ipp/index.html>.

5.1 Normative References

[BASE-ICS]

Base Conformance Levels ICS, February 2004.

[JDF]

CIP4 Job Definition Format (JDF), JDF/1.2, February 2004

5.2 Informative References

[DP-AppNote]

Integrated Digital Printing Application Note, version 1.0, work in progress, Available at <http://www.cip4.org>.

[ICS-std]

Hastings, "Standard for Writing a JDF Interoperability Conformance Specification (ICS)", version 1/0, 30 January 2003. See file: Standard-for-ICS-v1.0.doc, .pdf

File URL Application Note, Available at www.cip4.org.